FIG. 1

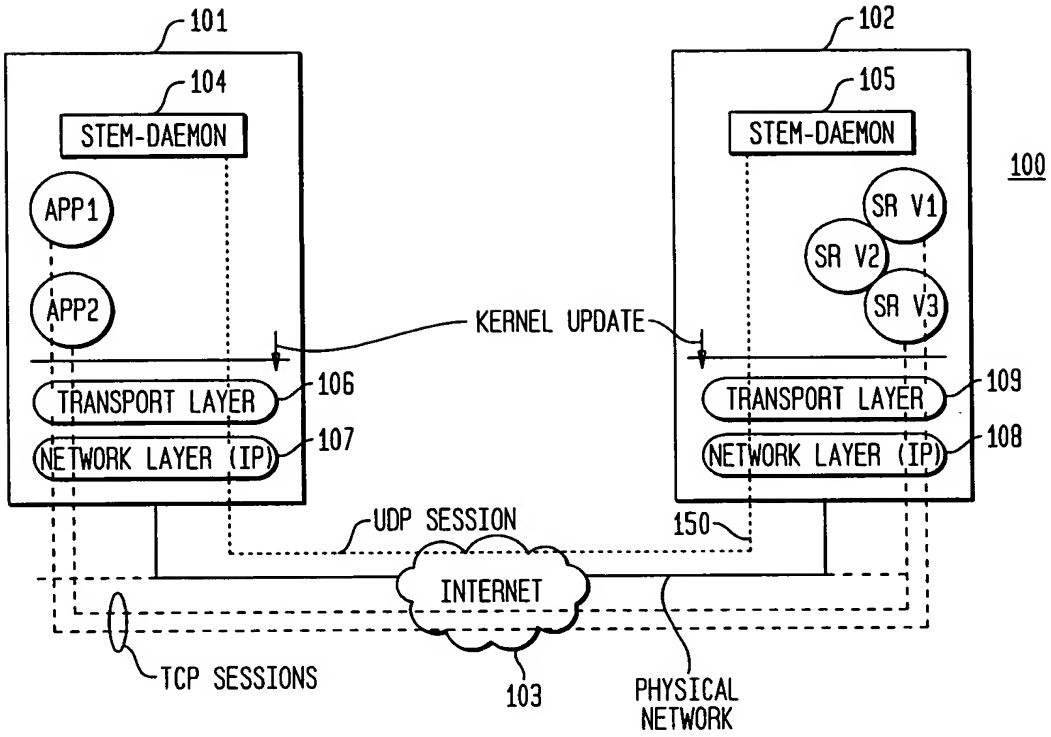
101
102
104
105
STEM-DAEMON
STEM-DAEMON
100
APP1
SR V1
SR V2
APP2
SR V3
KERNEL UPDATE
TRANSPORT LAYER
106
TRANSPORT LAYER
109
NETWORK LAYER (IP)
107
NETWORK LAYER (IP)
108
UDP SESSION
150
INTERNET
TCP SESSIONS
103
PHYSICAL NETWORK

FIG. 2

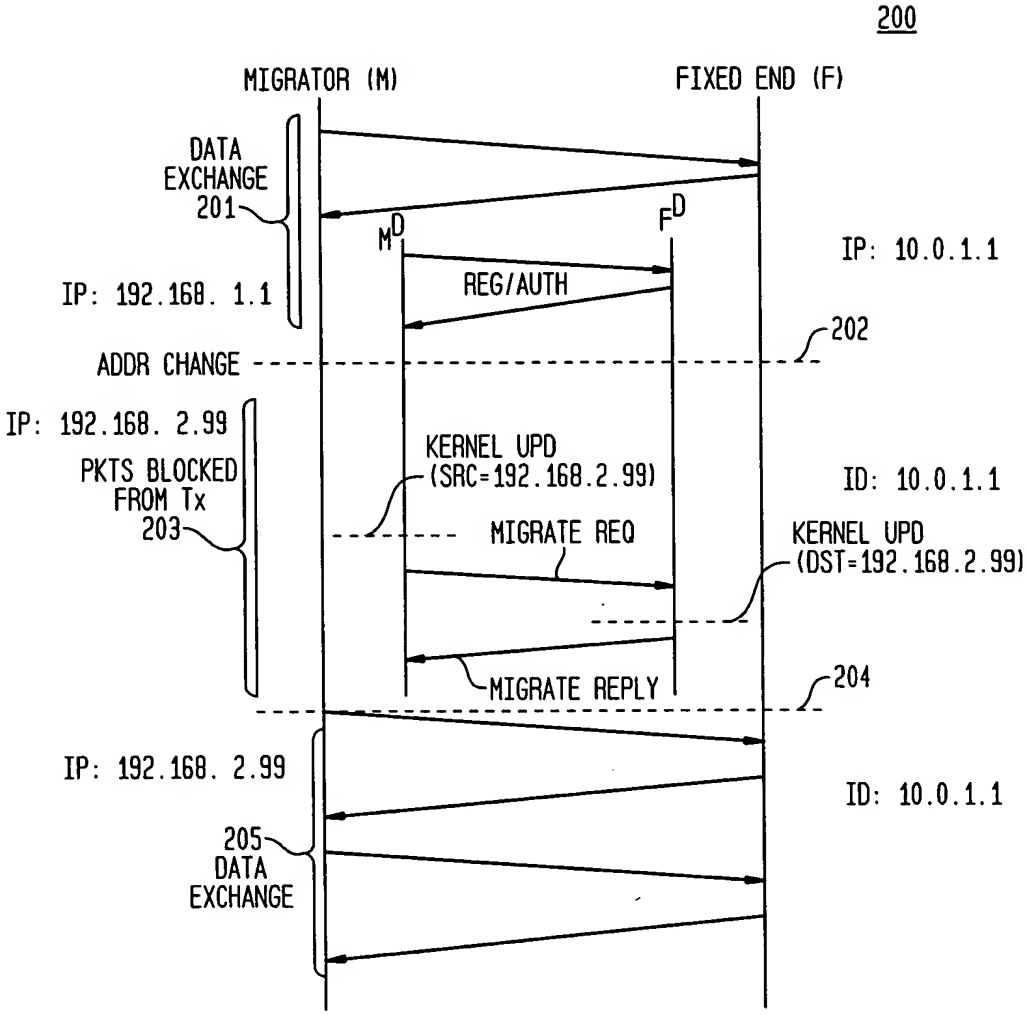
200
MIGRATOR (M)
FIXED END (F)
DATA EXCHANGE 201
IP: 192.168. 1.1
M^D
F^D
IP: 10.0.1.1
REG/AUTH
202
ADDR CHANGE
IP: 192.168. 2.99
PKTS BLOCKED FROM Tx 203
KERNEL UPD (SRC=192.168.2.99)
ID: 10.0.1.1
MIGRATE REQ
KERNEL UPD (DST=192.168.2.99)
MIGRATE REPLY
204
IP: 192.168. 2.99
ID: 10.0.1.1
205 DATA EXCHANGE

FIG. 3

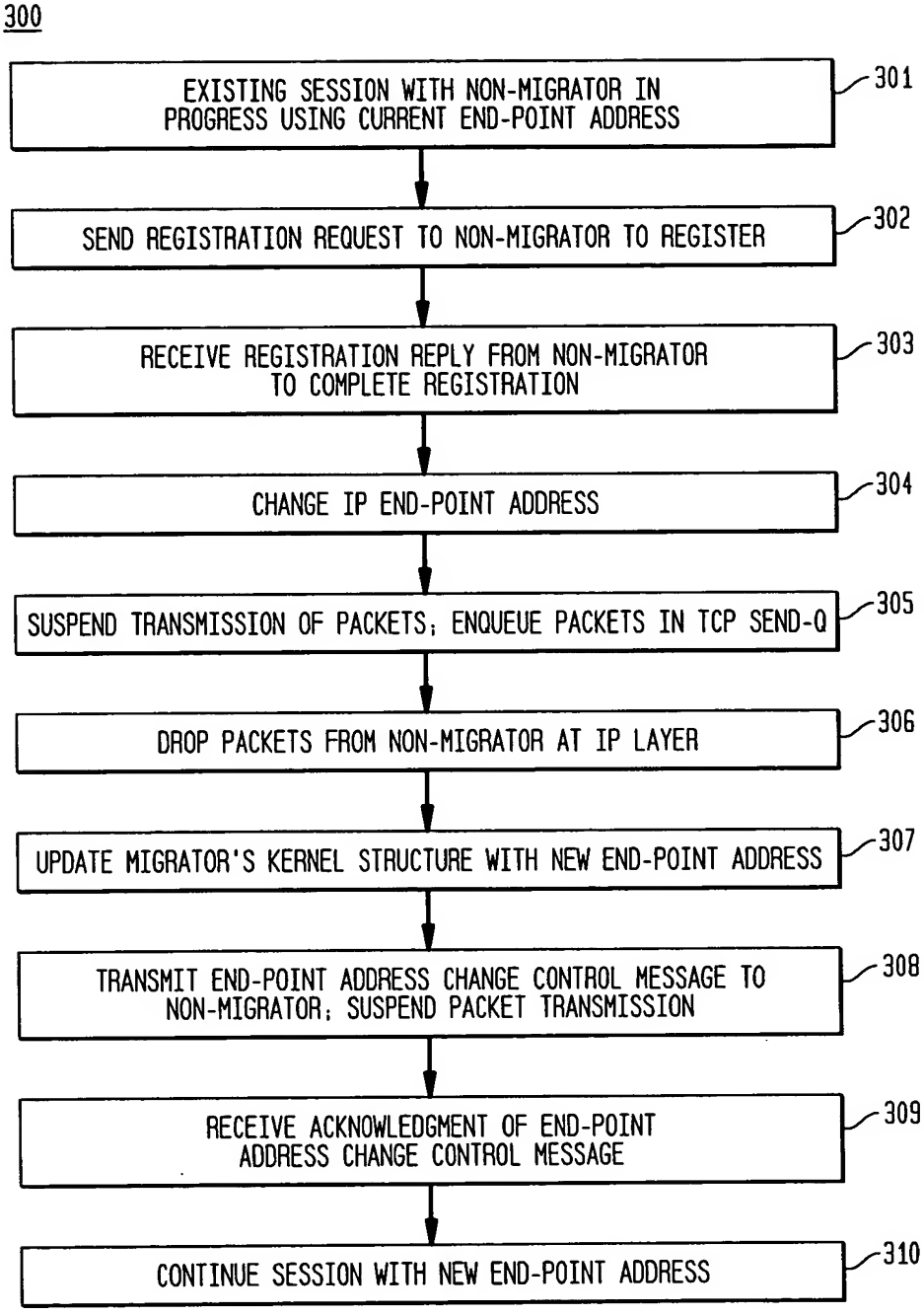
300
EXISTING SESSION WITH NON-MIGRATOR IN PROGRESS USING CURRENT END-POINT ADDRESS
301
SEND REGISTRATION REQUEST TO NON-MIGRATOR TO REGISTER
302
RECEIVE REGISTRATION REPLY FROM NON-MIGRATOR TO COMPLETE REGISTRATION
303
CHANGE IP END-POINT ADDRESS
304
SUSPEND TRANSMISSION OF PACKETS; ENQUEUE PACKETS IN TCP SEND-Q
305
DROP PACKETS FROM NON-MIGRATOR AT IP LAYER
306
UPDATE MIGRATOR'S KERNEL STRUCTURE WITH NEW END-POINT ADDRESS
307
TRANSMIT END-POINT ADDRESS CHANGE CONTROL MESSAGE TO NON-MIGRATOR; SUSPEND PACKET TRANSMISSION
308
RECEIVE ACKNOWLEDGMENT OF END-POINT ADDRESS CHANGE CONTROL MESSAGE
309
CONTINUE SESSION WITH NEW END-POINT ADDRESS
310

FIG. 4

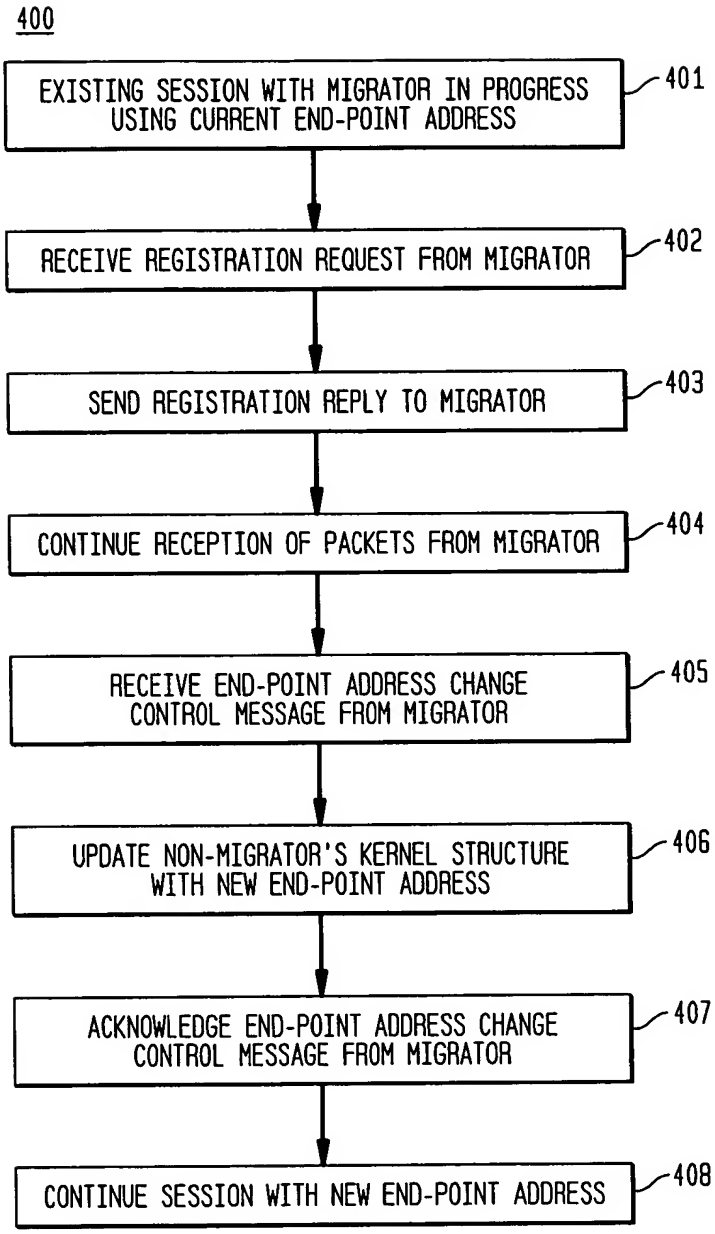
400
EXISTING SESSION WITH MIGRATOR IN PROGRESS USING CURRENT END-POINT ADDRESS
401
RECEIVE REGISTRATION REQUEST FROM MIGRATOR
402
SEND REGISTRATION REPLY TO MIGRATOR
403
CONTINUE RECEPTION OF PACKETS FROM MIGRATOR
404
RECEIVE END-POINT ADDRESS CHANGE CONTROL MESSAGE FROM MIGRATOR
405
UPDATE NON-MIGRATOR'S KERNEL STRUCTURE WITH NEW END-POINT ADDRESS
406
ACKNOWLEDGE END-POINT ADDRESS CHANGE CONTROL MESSAGE FROM MIGRATOR
407
CONTINUE SESSION WITH NEW END-POINT ADDRESS
408

FIG. 5

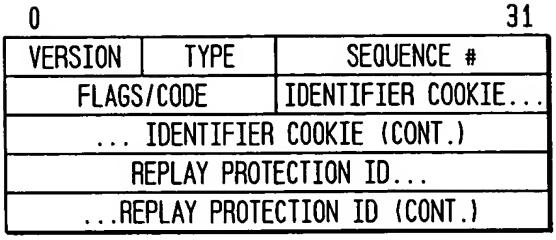

FIG. 6

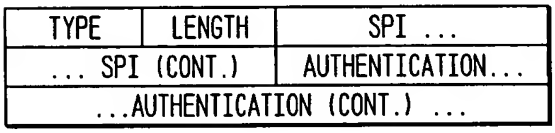

FIG. 7

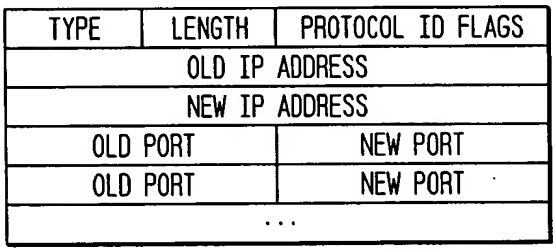
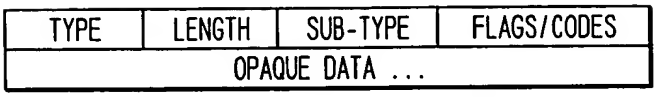
FIG. 8